DOCUMENT RESUME

ED 138 867 CG 011 335

AUTHOR Baine, David
TITLE In Situ Behavior Management in Homes and Schools: Some Procedures and Problems.
PUB DATE [75]
NOTE 22p.; Paper presented at the Annual Meeting of the Canadian Psychological Association (Toronto, Canada, June 9-11, 1976)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Audiovisual Aids; *Behavior Change; Change Agents; Classroom Observation Techniques; Educational Psychology; *Evaluation Methods; Family School Relationship; Models; Parent Child Relationship; Personal Adjustment; *Problem Children; Program Descriptions; *Student Behavior; *Teacher Role
IDENTIFIERS *In Situ Behavior Management

ABSTRACT

The paper reviews various difficulties inherent in clinical treatment and assessment of behavior management problems. The rationale for the development of in situ management programs in homes and schools is described. Problems in non-participant observation are reviewed as a rationale for the development of automated audio-video devices. A behavior management decision making model is presented. The model describes methods of data collection, recording and analysis, as well as, treatment selection, evaluation and removal. The problems in in situ analysis are reviewed. (Author)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED138867

In situ behavior management in homes and schools:

Some procedures and problems

David Baine

Educational Psychology

University of Alberta

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CG 011335

Running Head: "In situ behavior management"

In situ behavior management in homes and schools:

Some procedures and problems

Several difficulties are inherent in the study and treatment of behavior management problems in a clinical setting. During the assessment phase some behaviors characteristic of the natural environment may occur at lower rates or not at all, while behaviors unique to the clinic may occur at relatively high rates. There may be qualitative as well as quantitative changes in behavior. As a result, treatment may be directed to the modification of clinical rather than typical behavior. During the treatment phase, it is frequently hard to transfer behavior change from a clinic to a more complex, less predictable, natural environment. It is difficult to make a durable, generalized change in the behavior of a family member in isolation from both the home and family. If behavior is to be effectively modified, the change must take place when and where the behavior manifests itself (Ross, 1972). Ross, also, suggested that it is the contingencies in the child's social environment that are responsible for the child's adjustment. Since parents control many of these contingencies, training of the child's parents may frequently be desirable and absolutely necessary (Patterson, Littman and Hinsey, 1964). In situ behavior management involves the assessment and treatment of behavior management problems in the environment in which they typically occur and employs parents and teachers as the natural agents of behavior change.

In the in situ program described below, automated audio and video recording devices are installed in homes and schools to record observations of behavioral

events. A variety of auditory and visual prompting devices are also used to elicit and generalize desired behavior changes. It is important to note at the outset that this is not a highly financed demonstration project with large numbers of highly trained personnel. Rather, it is a multi-purpose pilot project designed to develop and test assessment and treatment procedures while providing a practicum placement for graduate and undergraduate students.

Method

Apparatus

Audio and visual monitoring. A television camera, recorder and electric timers are installed in a locked, soundproof cabinet on wheels. One or more cabinets are installed in an environment. The camera lens projects slightly beyond a black enclosure mounted behind a plexiglass shield and is not readily visible. Brechner (1974) has suggested that a motion picture camera may be unobtrusively mounted behind a Kaiser Aluminum Shade Screen that permits the unrestricted passage of light in one direction. The screen may also permit unobtrusive audio recording, however, as Breckner suggests, there may also be a problem of sound leakage from the recording equipment.

In the video cabinet the camera is installed at a height of 4 1/2 feet. Using a wide angle 4.8mm lens giving a viewing angle of approximately 120^{o}, the camera views a relatively large area. The electric timers may be preset to activate the equipment during a number of observation intervals over a 24 hour period. During each interval the equipment turns off and on for preselected periods of intermittent observation. For example, in a school the equipment may be programmed for observation from 8:30am - 10:00am, from 11:00am - 12:00am

and from 1:00pm to 3:00pm excluding gym period and lunch. During each observation interval the camera may be preset to record for 4 out of every 20 minutes.

These tapes may be used for base-rate and treatment data analysis. They provide a permanent record that may be reanalysed in the study of behaviors of newly found significance. Reanalysis also facilitates the development of inter-rater reliability. The tapes provide a standardized stimulus for teaching students the methods of behavior analysis. In addition, the tapes may be edited to provide feedback to parents and teachers about appropriate and/or inappropriate responses. Diagnostically significant events may be reviewed as they actually happened rather than as they are recalled by memory.

Behavioral recording. The classroom behavior analysis form used in this program (See Figure I) is an extension of a recording sheet suggested by Kubany (1973). The recording sheet may be used by a teacher in conjunction with an audio cassette or a kitchen timer providing intermittent signals to cue collection of behavioral observations on one or more students.

Insert Figure 1 about here

The two columns of numbers at the left hand side of the form describe variable intervals of respectively four, and six minutes. A non-participant observer in a classroom or home, or a person analysing video tapes may use the form while recording at shorter, fixed intervals. Kubany reports data to show that there is an insignificant difference in the observed rate of occurence of behavior recorded over 50 days at a fixed interval of 15 seconds and at a variable interval of 4 minutes Powell (1975) used a "momentary time sample" where

behavior was assessed at regular or irregular intervals. If a behavior was exhibited at the moment of observation, an instance of its occurrence was recorded. When recordings were made at various intervals of 120 seconds or less there was little difference between the results and those obtained by a continuous sample. When observations were made every 240 seconds, the average difference between the continuous and intermittent sampling procedures increased to an average of 15% with a range from 5-34%. A similar relationship exists when sampling is done every 400 seconds. However, intervals of 240 and 400 seconds produce positive and negative differences relative to a continuous measure. A summation of these differences over sessions gives results closely approximating a continuous measure. In addition to recording student behavior, a record may also be made of the prevailing conditions and teacher behaviors occurring at the instant of observation. To facilitate rapid recording, particular conditions and behaviors under study may be represented by a letter code at the head of each column. Where the behavior of more than one student is being recorded and where varying numbers of students may be within the field of observation, the total number of students in the field and the total number performing each behavior is recorded in the appropriate column at each point of observation. The percentage rate of occurrence of each condition or behavior may be calculated and plotted for each ten, twenty or thirty observations.

In homes, in addition to recording the frequency of isolated behaviors, a critical sequence analysis is also made. During an initial probe analysis of video tapes, the behavior analyst attempts to identify characteristic patterns or sequences of adaptive and maladaptive parent-child interactions. The analyst

also describes the conditions under which the sequence takes place and postulates what consequences occur that reinforce the participants to repeat the sequence. During the base-rate analysis the analyst looks for the recurrence of parts of the sequence in the absence of other parts. This analysis indicates which parts of the sequence are essential to its existence and which parts, therefore, should be modified during treatment. For example, in various situations one might focus on modifying the social or temporal conditions and/or the content or style or sequence of child or adult responses, and/or the consequences produced by these responses.

Data analysis. Frequency data for conditions, teacher and student behavior is plotted onto a multiple baseline recording form (See Figure 2). This form has several advantages over the plotting of data on separate graphs. First, the possible relationship between the conditions and the student and/or teacher behaviors may be readily apparent through the observation of correlated changes in adjacent graphs. Secondly, when a trial intervention is attempted the direct and indirect effects of the treatment may be easily observed. For example, in Figure 2, teacher verbal praise of quiet student work has been increased with a direct reduction of inappropriate student talking and an indirect reduction in teacher verbal threat.

Insert Figure 2 about here

Behavior management decision making model. Figures 3, 4 and 5 present a five phase sequential behavior management decision making model. The steps are described that are taken in proceding from a preliminary probe of data to base-rate

data collection and finally to treatment selection, implimentation, evaluation and removal.

Insert Figures 3, 4 and 5 about here

Most parts of the model will be readily understood by a reader familiar with the literature, and unnecessary explanation will not be provided. Several points, however, may be worthy of fuller discussion. Kazdin (1973) suggested that data should be collected on both target and nontarget behaviors to assess concommitant effects. It seems desirable not only to assess improvements in isolated behavior but also to assess changes in the general quality of life which might be grossly defined as the ratio of negative to positive events. It is conceivable that while treatment focusses on the improvement of isolated behaviors, there may be a deterioration in other areas of performance. Thus, the "index of global change" described in B.f.4. of the model seeks to monitor the general quality of life in the treatment environment.

The treatment procedures selected from C.5.b. of the model must be "engineered" into the environment to optimize success. It is not enough to want to change one's behavior, or to know how or when to change behavior; the difficulties in attempting to increase physical exercise or the reinforcement directed at one's spouse, or to decrease eating, smoking, or drinking alcoholic beverages are common. Old habits are strong in comparison to new, unestablished behaviors; the stimuli in a familiar environment are associated with, and elicit old habits. Frequently one remembers to alter his behavior only after the performance of a response that he had wanted to change. To modify a habit frequently requires considerable effort and often

the change is not reinforced. Other people in the environment may fail to notice the modification and may continue to respond to the individual in habitual ways.

Sometimes to motivate behavior change, implimentation of treatment strategies, data collection and completion of reading assignments a monthly treatment fee is charged, a contract is signed by the family and the behavior analysts; one-quarter of the montly fee is then rebated for each week in which the terms of the treatment contract have been fulfilled. To prompt behavior change, brightly colored discs or pictures are mounted in prominant places on the bathroom mirror, fridge, t.v., face of wrist watch, or kitchen table. The type and location of prompts is frequently changed in order to maintain a high stimulus value. Oven timers or prerecorded audio cassettes are used to prompt various responses. Other prompts include plastic knobs mounted on dinner forks, telephone calls, flaps mounted on light switches, and bright multicolored hanging mobiles activated by heat registers turning off and on.

Results and Discussion

This pilot, in situ, behavior management project has experienced some success. However, the program has also experienced many problems, apparently common to programs in the natural environment, but infrequently reported in the literature. Reppucci (1974) stated that a review of the literature leads one to believe that with a sound knowledge of behavior modification and a little fortitude, the environmental contingencies in the natural environment can be manipulated as they have been in the laboratory. An experienced practitioner is soon led to conclude, however, that for every success reported in the literature, there are a large number of failures. It also becomes apparent that many of the successes are the

result of highly financed, well controlled, demonstration projects with highly trained personnel. Perhaps a more realistic perspective of the complexities of in situ treatment could be established by reporting some of the sources of difficulty.

School related problems

One of the problems experienced in schools concerns the role of the external consultant. Recently there has been considerable criticism directed towards the traditional school psychologist with his WISC kit. The characteristic one-half page report of jargon confirming what the teacher already knew and failing to provide practical recommendations for program changes has led to considerable skepticism. This skepticism has certainly generalized to the psychological-behavioral consultant who is often greeted as the local alien. Lacking credibility, his task is one of asking teachers to change their habitual modes of response. These teachers often believe that it is the child who is at fault and they are offended when they are asked to change their own behavior. The mere suggestion of change can imply that the methods previously used by the teacher were wrong. Given these feelings, a teacher may be motivated to show that the consultant is wrong.

The lack of credibility is particularly important when a teacher is receiving conflicting advice from the regional clinic, a neighbouring teacher, other consultants and the principal. In many cases, it seems that the greater the classroom problem, the greater the variety of advice, and consequently, the lower the possibility of success.

The source of a referral may also be important. Teachers referred for help

by their principal may be suspicious of external consultants. The teachers may fail to participate in treatment, may participate passively or may actively sabatoge the program. Thus, the external consultant has considerable difficulty having his suggestions accepted and implimented particularly when he lacks control over the relevant sources of reinforcement such as salaries, promotions and job security.

Not being a part of the internal communication system in a school can also be a problem. In some schools building maintence staff using vacuum cleaners and floor polishers unplugged electrical timers programmed to turn video cameras off and on at preselected intervals. The cabinet housing the video cameras was sometimes moved out of alignment to facilitate dusting and polishing of the floors. It takes time to identify problems like these and to go through the proper channels of authority to rectify them.

There are a variety of problems relating to attitude change. There is frequently a pressure from the teacher, her neighbours and her principal for immediate action. Such action is incompatible with an empirically based program relying on the collection of base-rate data. There appears to be a strong bias toward searching for underlying, historic, organic or sociological causes of the problem and a rejection of methods that focus only upon contemporary behaviors. With problems of aggressive or acting out children, there appears to be a common preference for aversive control. Positive reinforcement is often viewed as a bribe and in conflict with one's feelings towards aggressive children. Teachers with token stores are often frowned upon by fellow teachers who feel that the need for such bribery is a sign of inefficiency. Occasionally the behavioral approach is considered to be mechanical and premeditated rather

than humanistic or spontaneous as some people think a classroom ought to be. It is often difficult to make lunch, recess, and gym periods contingent upon performance, when these activities, in equal proportion, are considered to be the right of all children. Sometimes one is prevented from using empirically sound methods. For example, the use of extinction in the form of ignoring inappropriate behaviors may be regarded as a failure to cope with an obvious problem. Time-out procedures may be regarded as cruel and unusual.

Treatment intervention may increase stress in an already stressful situation. The resulting teacher breakdown may actually be associated with the behavioral consultant. Thus, future observations, data collection or treatment intervention may be increasingly difficult to institute with other teachers.

Occasionally, when a technique begins to work, both parents and teachers stop using it as it no longer appears necessary. The resulting failure of the program may reduce credibility of the approach and again increase the difficulty of future intervention.

Home related problems

The task of the behavioral consultant is also difficult in working with families. O'Dell (1974) concluded after his review of the literature on parent training that behavioral training methods have not yielded well developed techniques for producing generality and durability of changes in parent behavior. This observation is certainly in agreement with the results of the present program. Where positive change has been achieved, it has usually affected one or more specific target behaviors and there have been few cases in which there was an identifiable change in the general quality of family life.

Lindsley (1970) reported that 70% of the parents in his training program did not attempt to use behavior management procedures following training. Morrey (1970) and Cohen (1970) respectively, reported that 70% and 50% of the parents in their programs discontinued their training before it had been completed.

In the present study, parents were charged up to $80.00 per month, one-quarter of which was rebated each week for completion of assigned reading, reinforcing at preselected rates or keeping performance records. For some families the rebate was reinforcing. Other families, for whom no other treatment costs were made, forfeited the money, apparently seeing it as a reasonable cost for services rendered. And of course, these parents were also creative and reasonable in describing their unusually busy week.

Numerous problems have also arisen about how and what to train parents. Some parents, trained in the use of specific techniques to handle crisis problems, without having received an extensive explanation of the underlying theory, later stopped using the technique when they found that it felt unnatural to perform or that it required too much effort. Other parents who received an explanation of the theory sometimes began to modify recommended techniques or innovate and develop their own.

Lipinski (1974) suggested that parents sometimes create an artificial treatment effect by making a child appear deviant during baseline to justify the treatment. Later, the child is made to appear improved to please the therapist. In fact, the video tapes made during early baseline periods of observation indicate that there is a period during which parents deliberately elicit problems behaviors in order to provide examples of behaviors that they had previously verbally

described. During this period, both parent and child appear to act in caricature.

The role of a family behavior consultant is also problematic. During the base-rate period of observation it is difficult to be unobtrusive and avoid playing a social worker role without appearing cold and aloof. Parents often want action, advice and interpretation now rather than an empirical based program of intervention, later. In working with families, the age, sex, appearance and style of the behavioral consultant is very important. On occasion competent and youthful looking female students, without their own families, have met with considerable difficulty attempting to influence a father's behavior.

Fathers, in fact, tend to present unique difficulties. Most often a father is away from family problems during the day. He does not consider the problems to be of as great a magnitude as his wife does. As a result he is not as willing to participate in training or treatment. Fathers tend to view treatment intervention as a violation of their domain. They are the boss; they exercise aversive control and demand compliance in a manner that many mothers are unable to do.

Johnson and Bolstad (1975) suggested that it requires ten to twelve days to habituate to an unobtrusive observer. In the present program, as in the work of Mercatoris and Craighead (1974), it appears that in homes and schools habituation is temporary and that there is spontaneous resensitization. In some homes, even after six motnhs of video observation, the family was almost continuously aware of the cameras. In other homes, family members claimed to be unaware of the presence of the cameras from the time of their installation.

These are a few of the difficulties that have been experienced in the present in situ treatment program.

The list is by no means exhaustive. The treatment model presented is not yet sufficiently developed to cope with the complexities of families and schools. These are difficult problems that remain to be solved inspite of the many successes reported in the literature.

SAMPLE

CLASSROOM BEHAVIOR ANALYSIS

DATE: _____ CLASSROOM: _____

OBSERVER: _____ SCHOOL: _____

CODING

CONDITION			STUDENT			TEACHER	
	CODE	TITLE	CODE	TITLE	CODE	TITLE
1	IW	INDEP. WORK	OS	OUT OF SEAT	VP	VERBAL PRAISE
2	CO	COOP. WORK	TA	TALKING	PM	PHYSICAL MANAG.
3	L	LECTURE	MD	MOVING DESKS	VT	VERBAL THREAT
4	FT	FREE TIME	FI	FIGHTING	NR	NO RESPONSE
5	TR	TRANSITION	OT	ON TASK		

FI 1

DATE 27/9/75

TIME 10:00

TO 10:10

	VI 4	VI 8	VI 16	CONDITIONS IW	CO	L	FT	TR	STUDENT TOTAL	OS	TA	MD	FI	OT	TEACHER VP	PM	VT	NR
1	2	12	12	✓					11					7				✓
2	5	2	8	✓					12	1				8				✓
3	7	10	28	✓					12	1	2			9				✓
4	1	4	2	✓					12	3	5	1		7			✓	
5	3	6	24	✓					12					3		✓		
6	6	14	6	✓					12	2	4			5				✓
7	4	8	24	✓					11	2	6			3				
8	6	2	6					✓	12	10	8	2		2				
9	4	10	30					✓	13	10	6		2	4			✓	
10	1	14	12					✓	11	4	2			7			✓	
SUB TOTAL				7				3	118	33	36	3	2	50	0	1	3	4
PERCENTAGE				70				30		27	30	2	2	42	0	10	30	40
11	2	8	16															
12	5	10	4															
13	3	6	8															
14	7	4	30															
DATE 15	2	12	28															
16	1	4	6															
TIME 17	7	12	24															
18	3	14	16															
TO 19	4	2	12															
20	5	6	3															
SUB TOTAL																		
PERCENTAGE																		
21	2	12	12															
DATE 22	5	2	8															
23	7	10	24															
TIME 24	1	4	3															
25	3	6	23															
26	6	14	6															
TO 27	4	8	4															
28	2	2	30															
29	5	4	12															
30	3	10	12															
SUB TOTAL																		
PERCENTAGE																		
GRAND TOTAL																		
PERCENTAGE																		

DAVID BAINE, EDUCATIONAL PSYCHOLOGY, U. of A., EDMONTON, ALBERTA, CANADA

FIG. 1. CLASSROOM BEHAVIOR ANALYSIS

MULTIPLE BASELINE RECORDING

DAVID BAINE, EDUCATIONAL PSYCHOLOGY
UNIVERSITY OF ALBERTA, EDMONTON

FAMILY OR CLASSROOM SAMPLE

OBSERVER _____ OBSERVATION INTERVAL ____ TO ____

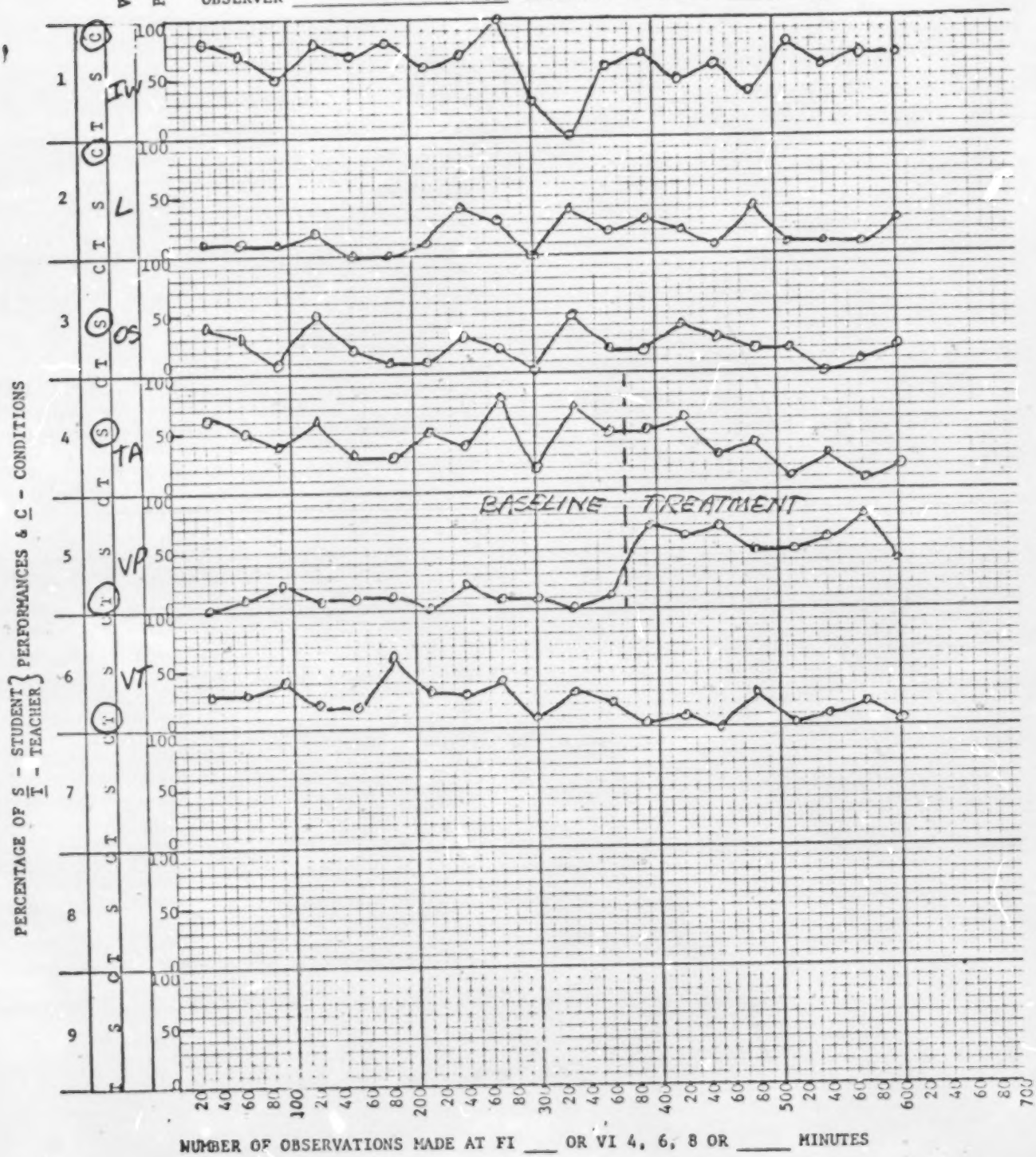
VARIABLE
PERCENT
1 S C T IW
2 S C T L
3 S C T OS
4 S C T TA
5 S C T VP
6 S C T VT
7 S C T
8 S C T
9 S C T
100
50
0
BASELINE
TREATMENT
PERCENTAGE OF S - STUDENT } PERFORMANCES & C - CONDITIONS
T - TEACHER
NUMBER OF OBSERVATIONS MADE AT FI ___ OR VI 4, 6, 8 OR ____ MINUTES

FIG. 2. MULTIPLE BASELINE RECORDING

BEHAVIOR MANAGEMENT DECISION MAKING MODEL

David Baine, Learning and Development Clinic, University of Alberta, EDMONTON, Alberta.

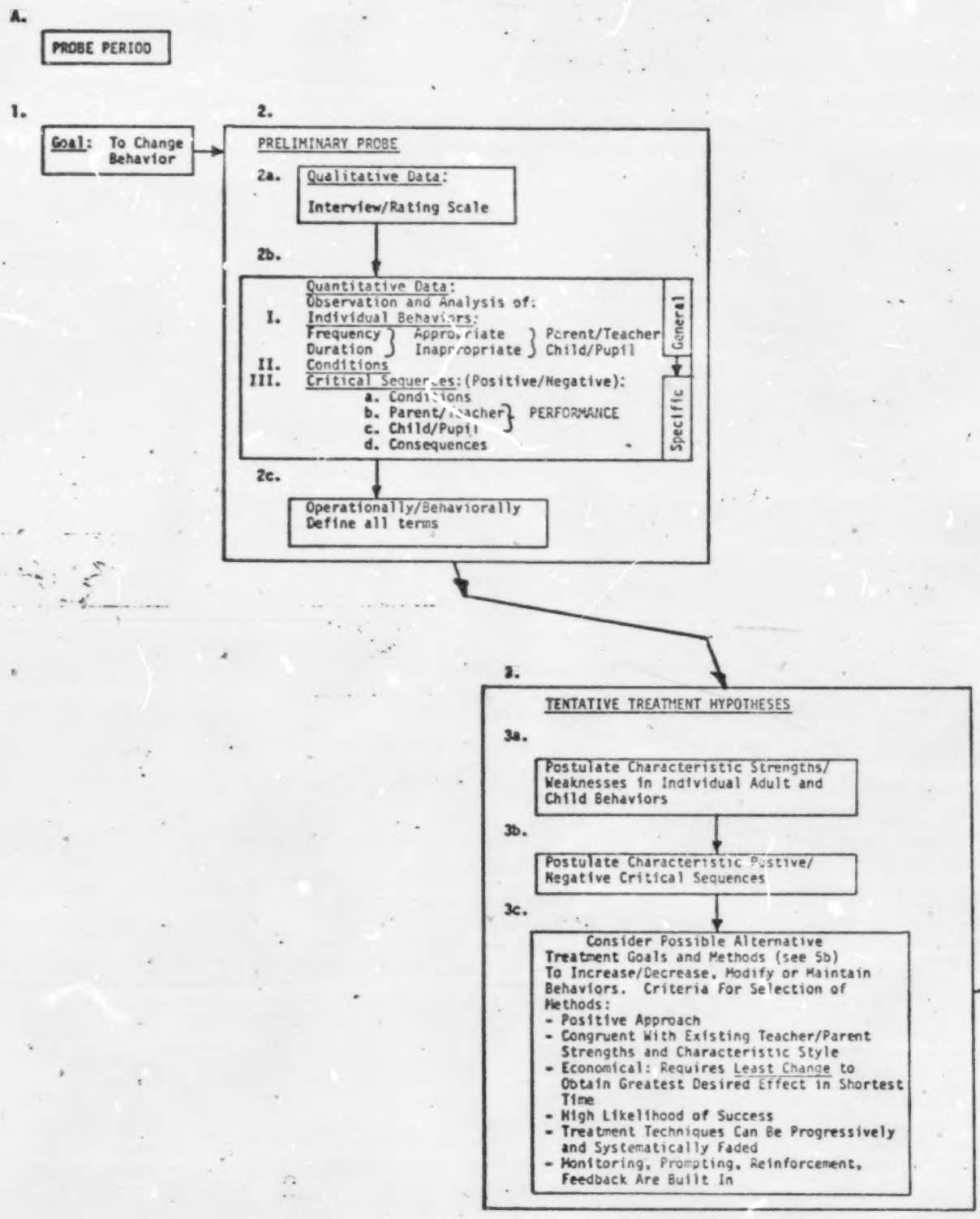

FIG. 3. PART 1. DECISION MAKING MODEL

B.

BASE-RATE PERIOD

4.

BASE-RATE DATA COLLECTION

4a. Select Observation Technique:
- Self-Monitor
- Peer Monitor
- Parent or Teacher
- Automated (Video)

4b. Select Recording Technique: Continuous, Event, Time/Interval (Coded), Playchek

4c. Record Individual Adult and Child Behaviors and Conditions As in (2b.I;

4d. Plot Number, Rate or Percent Of Adult & Child Behaviors And Conditions On Multiple-Baseline Graphs

4e. Assess Critical Sequences - Conditions, Performance Consequences As In (2b. III)

4f. Calculate Proportion of Total Number of Positive and Negative Events To Be Used In Later Analysis As An "Index Of Global Change"

4g. In View Of Data, Validate Tentative Hypotheses Regarding Individual Behaviors, Critical Sequences, Treatment Goals and Methods. If All Hypotheses in 3a and 3b Have Been Validated, Proceed; If Not Validated, Omit, Add or Revise Hypotheses and Validate.

4h. Terminate Base-Rate Data Collection When Representative Sample Of Data Collected Under All Conditions And When Trends Have Stabilized (Continue To Rise, Fall or Level), And When Hypotheses In 3a and 3b Have Been Validated.

4i. Examine Multiple base-line Graph For Correlated Changes Among Conditions, And Adult And Child Behaviors.

4j. Select Variables For Trial Intervention

C.

TREATMENT SELECTION

5.

5a. State Behavioral Objectives: Long Term/Short Term For Parent/Teacher, Child/Pupil In Terms Of:
- Conditions
- Performance
- Criteria - Psychosocial
- Statistical

5b. Treatment Selection (Increase, Decrease, Teach)

ANTECEDENT MANAGEMENT:

1. Peer Tutoring
2. Modelling
3. Shilling
4. Role Playing (Rehearsal)
5. Prompting - Imitative
   - Physical
   - Verbal
6. Fading
7. Discriminative Stimuli
8. Rules
9. Stimulus Control
10. Prostheses
11. Situation Structuring
12. Instruction
13. Task Analysis
14. Leading
15. Remove Interference
16. Reinforcement Exposure

CONSEQUENCE MANAGEMENT:

1. Positive Reinforcement
   - Group Contingent
   - Descriptive Praise
   - Self-Reinforcement
   - Premack Principle
   - Token Economy
   - Contracting
   - Lotteries/Auctions
   - Activity/Free Time
   - Incompatible Behavior
   - Shaping
   - Chaining: Forward/Reverse
   - Feedback
   - Counter Conditioning
2. Extinction
3. Response Cost
4. Negative Reinforcement
5. Time-Out
6. Punishment I

5c. Reinforcement Selection

Reinforcement Hierarchy:

Delayed ↑ Immediate

Intrinsic
Symbolic
Non-Negotiable
Social
Verbal Feedback or Praise
Token
Role Privilege
Activity
Prizes
Food Treats
Primary Reinforcers

Indigenous ↓ Imported

5d. Specify Contingency:
- Continuous
- Intermittent
- Interval
- Ratio
- Fixed
- Variable

5e. Select Reinforcer Administration Procedure

5f. Explain and Confirm Objectives and Methods With Parent/Teacher; Proceed Only With Agreement As To Objectives And Methods.

FIG. 4. PART 2. DECISION MAKING MODE

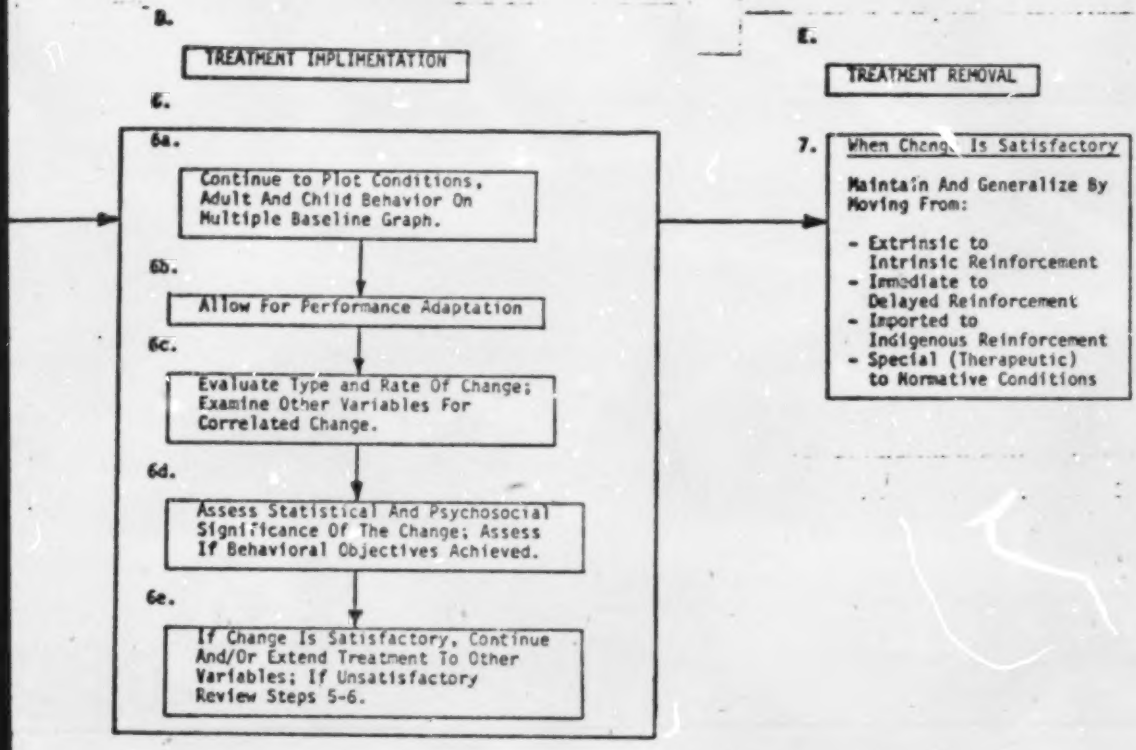
5.
TREATMENT IMPLIMENTATION
6.
6a.
Continue to Plot Conditions, Adult And Child Behavior On Multiple Baseline Graph.
6b.
Allow For Performance Adaptation
6c.
Evaluate Type and Rate Of Change; Examine Other Variables For Correlated Change.
6d.
Assess Statistical And Psychosocial Significance Of The Change; Assess If Behavioral Objectives Achieved.
6e.
If Change Is Satisfactory, Continue And/Or Extend Treatment To Other Variables; If Unsatisfactory Review Steps 5-6.
7.
When Change Is Satisfactory
Maintain And Generalize By Moving From:
- Extrinsic to Intrinsic Reinforcement
- Immediate to Delayed Reinforcement
- Imported to Indigenous Reinforcement
- Special (Therapeutic) to Normative Conditions
8.
TREATMENT REMOVAL

FIG. 5. PART 3. DECISION MAKING MODEL

References

Brechner, K.C., Linder, D.E., Meyerson, L. and Hays, V.L. A brief report on a device for unobtrusive visual recording. Journal of Applied Behavior Analysis, 1974, 7, 499-500.

Cohen, H.C. The P.I.C.A. project. Year 2. Project interim report. Programming interpersonal curricula for adolescents. Silver Springs, Md.: Institute for Behavioral Research, 1970, (ERIC Document Reproduction Service, ED 044 717).

Johnson, S.M. and Bolstad, O.R. Reactivity to home observation: A comparison of audio recorded behavior with observers present or absent. Journal of Applied Behavior Analysis, 1975, 8, 181-185.

Kazdin, A.E. Methodological and assessment considerations in evaluating reinforcement programs in applied settings. Journal of Applied Behavior Analysis, 1973, 6, 517-531.

Kubany, E.S. and Sloggett, B.B. Coding procedures for teachers. Journal of Applied Behavior Analysis, 1973, 6, 339-344.

Lindsley, O.R. Procedures in common described by a common language. In C. Neuringer and J.L. Michael (Eds.), Behavior modification in clinical psychology. New York: Appleton - Century - Crofts, 1970.

Lipinski, D. and Nelson, R. Problems in the use of naturalistic observation as a means of behavioral assessment. Behavior Therapy, 1974, 5, 341-351.

Mercatoris, M. and Craighead, W.E. Effects of nonparticipant observation on teacher and pupil classroom behavior. Journal of Educational Psychology, 1974, 66, 512-519.

Morrey, J.G. Parent training in precise behavior management with mentally retarded children. (Doctoral dissertation, Utah State University) Ann Arber, Mich.: University Microfilms, 1970, No. 70-27011.

O'Dell, S. Training parents in behavior modification: a review. Psychological Bulletin, 1974, 81, 418-433.

Patterson, G.R. A basis for identifying stimuli which control behaviors in natural settings. Child Development.

Patterson, G.R., Littman, R.A. and Hinsey, W.C. Parental effectiveness as reinforcers in the laboratory and its relation to child rearing practices and adjustment in the classroom. Journal of Personality, 1964, 32, 180-199.

Powell, J., Martindale, A. and Kulp, S. An evaluation of time-sample measures of behavior. Journal of Applied Behavior Analysis, 1975, 8, 463-469.

Reppucci, N.D. and Saunders, J.T. Social psychology of behavior modification: Problems of implementation in natural settings. American Psychologist, 1974, 649-660.

Ross, A.O. Behavior therapy. In B.B. Wolman (Ed.), Manual of child psychopathology. New York: McGraw-Hill, 1972.